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Feature Article - Treatment of Insurance Services in the Australian Consumer Price Index

(Paper by Keith Woolford)

INTRODUCTION

Over the year to June quarter 2000 the prices for general insurance services included in the Consumer Price Index (CPI) have risen by approximately 30% on average. The major cause of increase has been the progressive impact of the GST levied on that proportion of annual premiums related to the provision of insurance cover beyond 1 July 2000. The methodology used to measure insurance services in the CPI means that the increases recorded in the CPI are significantly greater than the GST induced increases in the gross premiums payable by households.

The insurance services exhibiting these changes were house and house contents insurance, motor vehicle comprehensive and third party property insurance and compulsory motor vehicle third party insurance. Private health insurance did not show such a change as it is treated differently to the other insurance classes in the CPI. Life insurance and personal accident insurance are not included in the CPI.

This article outlines the conceptual treatment of insurance services in the CPI to assist in explaining why the prices of those services have increased at a faster rate than gross premiums.

BACKGROUND TO THE CONCEPTUAL TREATMENT

The broad objective of a consumer price index is to measure changes over time in the general level of prices of goods and services that a reference population acquires, uses or pays for consumption. In practice, there are essentially three conceptually valid approaches that can be adopted when compiling a CPI. These alternative conceptual approaches were described in detail in **Information Paper: Issues to be Considered During The 13th Series Australian Consumer Price Index Review** (Cat. no. 6451.0), released on 9 May 1997. The selection of approach depends on the principal purpose to be served by the CPI.

Since June quarter 1998, the principal purpose of the Australian CPI has been to provide a general measure of price inflation for the household sector as a whole. This is best achieved by constructing what is referred to as an acquisitions index. Insurance is one area of the index where the choice of approach has a discernible impact on the outcome.

In its basic form, insurance can be thought of as a process or scheme for the sharing of risk. The participants in the scheme (policy holders) contribute funds (premiums) which are then available to be disbursed (claims) to those that suffer a loss. The scheme is viable provided the risk is relatively low (ie the individual contributions represent a relatively small proportion of the value of the potential loss). If an insurance scheme was run directly by the participants (ie with no additional costs or the need to make a profit), then it would generally be expected that the sum of

the premiums paid by all participants would equal the sum of the claims paid to that smaller number of participants experiencing a loss. In other words, the premiums paid by the participants would be exactly offset by the claims received by the participants.

In practice, things are not quite so simple. Administration of insurance schemes is a specialist activity that is generally beyond the capacity of the policy holders. This role is therefore undertaken by insurance companies. In simple terms, the value of the service provided by the insurance company to the policy holders in aggregate is represented by the difference between the premiums paid and the claims received. This amount covers the administration costs and profits of the insurance company.

In constructing a measure of price inflation for the household sector as a whole, the item of interest is the value (or price) of the service provided by the insurance company rather than the total premiums paid. In contrast, changes in gross premiums alone would be relevant in the construction of an index designed to measure changes in household living costs because the amounts received by way of claims are not relevant as they are regarded as sources of income. Another way of looking at this is to say that in constructing an inflation index it is important that each item in the index is accorded a weight which reflects its real economic significance, while in constructing a living cost index it is important that each item be accorded a weight which reflects its relative share of gross household expenditures.

In more formal terms, the value of the insurance service acquired by households is defined as being equal to:

	gross insurance premiums payable by households
+	premium supplements
-	claims
-	changes in actuarial reserves

MEASURING PRICE CHANGES OF INSURANCE SERVICES

While it is possible to calculate the nominal value of the ‘net’ insurance service charge for weighting purposes, it has not been possible to devise a conceptually sound corresponding price measure. For this reason, statistical agencies that have adopted the ‘net concept’ for weighting insurance services have also chosen to utilise movements in gross insurance premiums as a proxy price measure.

The ABS further decomposes the net insurance service charge into two elements — the insurance service before tax and the taxes on premiums (e.g. stamp duties, goods and services tax, other levies). The price measure for insurance service before tax is constructed by reference to gross premiums before tax. The price measure for taxes on premiums is constructed by reference to the tax payable on gross insurance premiums.

Even using this ‘proxy’ approach, the price change for ‘ insurance services’ will differ from the price change in ‘gross premiums’ due to the differing impact of taxes. This arises because the taxes are invariably levied on the value of the gross premiums rather than on the value of the insurance service acquired. This is best illustrated by way of a simple example.

In the case of no premium supplements and no actuarial reserves, the insurance service charge is simply given by gross premiums less claims. Now consider the following scenario where the only change between periods one and two is a change in the tax rate (from 5% of gross premiums to 15%).
Under this scenario it is clear that the insurance service charge has increased from $45 to $55

(an increase of 22.2%) whereas gross premiums have only increased by 9.5%.

In a living cost index, insurance would have a weight based on the value of gross premiums (ie $105) and show a price change of 9.5%. In an inflation index, insurance services would have a weight based on the value of the insurance service (ie $45) and show a price change of 22.2%. The change in taxes levied on the value of gross premiums have a greater effective impact on an inflation index because, while the dollar value of the change in taxes is the same as under the living cost index, the amount is being applied to a smaller denominator.

Note that the goods and services tax became payable on insurance premiums for coverage extending beyond 1 July 2000. Therefore, from the September quarter 1999 to June quarter 2000, the amount of goods and services tax levied on insurance became greater each quarter, thus contributing to a sequence of significant price increases for insurance services.

CLASSIFICATION OF INSURANCE SERVICES IN THE 14TH SERIES CPI

For the 14th series CPI, which will be introduced from September quarter 2000, the commodity classification has been revised. In this classification, the insurance categories included in the CPI (namely house and house contents and motor vehicle comprehensive and compulsory third party insurance) will be combined into a single item ‘Insurance services’, in the new Miscellaneous group. More information about the 14th series CPI is included in **Information Paper: Introduction of the 14th Series Australian Consumer Price Index** (Cat. no. 6456.0), released on 29 September 2000.

FURTHER INFORMATION

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